FUND 104
INFORMATION TECHNOLOGY

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2001 Advertised Budget Plan, as approved by the Board of Supervisors on April 24, 2000:

- A decrease of $5,306,578 in revenues and expenditures due to legislation passed by the 2000 General Assembly that requires localities to account for E-911 revenue and expenditures as a separate fund. Previously, a portion of the County's E-911 fees was reflected in this fund to support Project IT0001, Public Safety Communications Network. As a result of this change, E-911 revenue and related expenditures will be presented in a new fund, Fund 120, E-911.

County Executive Proposed FY 2001 Advertised Budget Plan

Agency Overview

Fund 104, Information Technology, was established in FY 1995 to strengthen centralized management of available resources by consolidating major Information Technology (IT) projects in one fund. Based on the 1994 Information Technology Advisory Group (ITAG) study, this fund was created to account for spending by project and is managed centrally by the Department of Information Technology. The E-911 Emergency Telephone Service Fee, a General Fund transfer, the State Technology Trust Fund, and interest earnings are sources for investment in Information Technology projects.

The County's technological improvement strategy has two key elements. The first element is to provide an adequate infrastructure of basic technology for agencies to use in making quality operational improvements. The second is to redesign existing business processes with technology to achieve large-scale improvements in service quality and achieve administrative efficiencies. The County's long-term commitment to provide quality customer service through the effective use of technology is manifested in service enhancements, expedited response to citizen inquiries, improved operational efficiencies, better information for management decisions, and increased performance capabilities.

FY 2001 project funding totals $25,339,844. Of this amount, $18,393,266 is transferred from the General Fund, $440,000 is collected as a result of the State's Technology Trust Fund, $1,200,000 is projected in interest earnings, and $5,306,578 results from revenues from E-911 Emergency Telephone Service Fees to support public safety communication upgrades. The remaining $9.7 million, of the total $15 million in E-911 revenue collected, is included in the General Fund to offset telecommunications and maintenance costs of emergency public safety communications.

It is important to note that FY 2001 Information Technology requests, including funding for the continuation of major redesign initiatives, as well as smaller agency specific technology enhancements, totaled approximately $35 million. Significant review and analysis were required to manage technology needs within limited fiscal resources. Project review included identification of projects mandated through regulations or by contractual obligations required in FY 2001, projects that provide convenient access to information or services, completion schedules including the next logical stopping point for each phase of the project, projects with technologies that have applications across the County, new projects, and continued investment in the County's technological infrastructure.

In order to prioritize the requests, project consideration was guided by seven information technology priorities established by the IT Senior Steering Committee. These priorities are as follows:

Priority		FY 2001 Advertised Funding
1.	Projects mandated by State/Federal regulations.	$0.09 million
2.	Projects necessary to complete a previous project investment, such as multi-year lease payments.	$6.00 million
3.	Projects that enhance customer access to information about County services.	$1.95 million
4.	Projects that explore technology with application across the County, such as workflow or imaging technology.	$2.47 million
5.	New projects, including those that may be necessary to replace legacy systems.	$3.82 million
6.	Continued investment in technology infrastructure that is necessary for the introduction and continuation of a variety of information systems.	$5.70 million
7.	Projects to support the Public Safety Communications Center (PSCC).	$5.31 million
	TOTAL	$25.34 million

In FY 2001, funding of $20.03 million is included for non-PSCC initiatives that meet the priorities established by the IT Senior Steering Committee. These projects will support initiatives in 18 agencies in the Human Services, Planning and Development, General County Services, Public Safety and Court Services program areas.

Mandated

Mandated enhancements are improvements or alterations to software and/or hardware that are directed by the Board of Supervisors, the Commonwealth of Virginia, and the Federal Government. In addition, mandated requirements in previous years have included funding necessary to make County systems Y2K–compliant. In FY 2001, the State Board for the Department of Juvenile Justice is requiring all jurisdictions to provide up-to-the-minute data, accessible on-line via its new system. Therefore, funding of $.09 million has been included for a project mandated for the Juvenile and Domestic Relations District Court system that will provide an automated interface between the County and the Commonwealth's Juvenile Justice Information System to permit transmission and retrieval of data.

Completes Investment

Several projects require funding to meet contractual obligations in order to complete major technology initiatives undertaken in previous years. While these projects might have subsequent phases, the primary initiative will be complete in FY 2001 for three major projects: the Planning and Development Project, the Tax Administration Project, and the Library Project.

To complete prior year investments, a total of $2.25 million is included for Planning and Development projects. FY 2001 funding in the Planning and Development Business Process Redesign Project will add the remainder of the zoning applications (special exceptions, special permits, and variances), as well as make several improvements such as providing management reports to track productivity and workload, to the existing Zoning and Planning System (ZAPS). When this project is completed, the Rezoning Application System (RAPS), an application running parallel to ZAPS, will be shut down. This arrangement will permit users to operate on one unified system instead of two parallel systems, as is the current situation. In addition, this project will integrate the additional zoning application information into the Land Development System (LDSNet), which is being developed in FY 2000, and will replace ZAPSNet. LDSNet will provide access to detailed information on zoning applications, site and subdivision plans, images of approved development plans, and proffer statements on the County's Intranet and Internet. Funding is also provided for initiatives that will further the completion of both the Inspection Services Information System (ISIS) and the Plan and Agreement Monitoring System (PAMS) Handheld Project by providing additional functionality, such as providing on-line help and the ability to download data from the mainframe.

Funding of $1.0 million is included in FY 2001, based on cost requirements, to fully fund the computer-assisted mass appraisal (CAMA) project, which represents the final phase of the Tax Systems Modernization Project. The majority of funding required for CAMA will come from the balance of project funds remaining after completion of the personal property tax system. The replacement of this portion of the project was included in the original Tax Systems Modernization Project; however, Y2K issues and requirements associated with State changes to the personal property system necessitated additional funding to complete the project. In addition, funding of $.351 million has been included for several improvements to the County's corporate financial information systems in the ongoing Tax/Revenue Administration Project. These improvements include a streamlined process of archival and reporting management, installation of software to facilitate the restructuring of the classification structure within FAMIS, electronic payment processing enhancements, and Web enabling of CASPS/FAMIS.

Another multi-year project that will be complete in FY 2001 is Phase III of a three-year effort to implement the Integrated Library System. This final phase, funded at $1.522 million, will replace current library business applications with an upgraded version, and provide NT LAN services in all libraries for network printing, file storage and sharing, and remote management of resources. In addition, all libraries will have data communications equipment and circuit upgrades. Public terminals will be replaced with network workstations, which will allow library users to maximize the information retrieved from FCPL and remote sources. Self-checkout machines will also be located in all libraries.
Funding is also provided to continue the investment in Circuit Court's Land Records Application Systems for continued data conversion lease purchase payments of system equipment, and system enhancements for Courts Public Access Network (CPAN) integration. FY 2001 funding of $.872 million will provide lease payments for system equipment, as well as enhancements including e-Commerce, new equipment, State mandated changes, and other enhancements which may include judgement abstracts and notices, enhanced search functionality, or operational statistical reports.

Enhances Customer Access to Services

Ultimately, providing citizens, the business community, and County employees with timely, convenient access to appropriate information and services is one of the most important uses of information technology. There are several projects funded in FY 2001 that provide convenient public access to information and services. Three funded initiatives that allow citizens to get information 24 hours a day, seven days a week, are the Internet, Kiosk, and the Interactive Voice Response (IVR) projects. It should be noted that the FY 2001 Advertised Budget Plan for the Department of Information Technology includes five positions to support the Internet redesign. In Fund 104, Information Technology's Public Access Project, funding in the amount of $.25 million is provided for additional Information Kiosks which use multimedia (audio, video, graphics, and text) touch screen technology at times and locations convenient to the public, as well as enhancements such as the ability for onscreen typing and the ability to send faxes, and $.5 million for additional functionality for the County's services on the Internet. An amount of $.15 million has been included for the Interactive Voice Response including projects for the Office for Children and the Office of the Sheriff's Victim Witness Program that will allow County residents to obtain information using touch tone telephones. One popular feature on the County's Internet site is the ability for citizens to report address changes and vehicle sales via the Internet using a secure transaction form. Currently, the Department of Tax Administration staff must print the information submitted daily via the Internet and input this data into the mainframe tax system. Funding of $.25 million is included for a project that will provide citizens direct on-line vehicle registration capability of the approximately 150,000 new vehicle registrations reported annually, freeing staff from rekeying the information.

In addition, funding of $.72 million is included for the Geographical Information Systems (GIS) that will not only provide updated information, but will also allow it to be accessed through the Internet. Another project, funded at $.08 million, will support the purchase of an off-the-shelf, more widely used and centrally updated numbering system to replace the "internally developed" stock numbering systems currently used by both Fairfax County and the Fairfax County Public Schools. This system is essential to derive the full benefits of any e-Commerce implementation.

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Technology with Countywide Application

Several projects have technology that can be introduced and implemented across organizational boundaries and provide technology with Countywide application. Although there is some funding for the continuation of existing projects in the total funding of $1.5 million for the Human Services ASSIST project included in FY 2001, the majority of the funding is provided for a workflow application that has applicability across the County. FY 2001 funding of $.9 million is included for completion of the development and implementation of a workflow management technology. This technology will automate current manual processes of sharing data across agencies, streamlining, and speeding up the processing of documents that must move across agencies and offices for completion. FY 2001 funding also includes $.34 million for a vendor and contract management system that will replace the Virginia Uniform Welfare Reporting System (VUWRS), a 26-year-old payment system for client services. The VUWRS system is unable to meet the payment and reporting requirements because of its inflexibility, the lack of linkages with new State systems which staff must use, and the probability for lack of future mainframe support due to its obsolete platform. In addition, funding of $.26 million will complete development of a decision support system which will allow data to be extracted from existing Human Services systems and compiled into a single database for use in planning, forecasting, trend analysis, and reporting.

Other projects proposed by agencies and funded in FY 2001 have Countywide workflow and imaging applicability. These technologies will automate current manual processes of sharing data across agencies, and streamline and speed up the processing of documents that must move across agencies and offices for completion. Both the Department of Purchasing and Supply Management and the Department of Telecommunications and Consumer Services sponsored projects have total funding of $.25 million, which will expand the County's existing contract with LaserFische to acquire imaging software and necessary hardware with the goal of eliminating the hardcopy of documents where possible, and making retrieval of imaged documents easier. The FY 2001 budget for the Department of Information Technology includes a new position to support imaging and workflow projects.

Several smaller scale projects, located in the Tactical Initiatives Project, received total funding of $.39 million. To continue the County's investment in the Computer Aided Dispatch (CAD) projects for the Police Department, funding of $.1 million is included to provide a user-friendly graphical user interface (GUI) enhancement to the case management function of the system. Another project that will benefit the Courts is the development of a system to improve the scheduling of court cases, which affects the Police Department, other law enforcement agencies, and the General District Court. Funding of $.05 million has been included for this system. As systems become more complex and house data from multiple agencies, the need for proper data management is critical. Data management tools provide protection along with the flexibility to correct invalid or modified data; therefore, funding of $.15 million is included for an automated tool to monitor and ensure integrity of all data located in the Land Development System (LDS) database. To provide funding to implement integrated technology that provides the call center with tools to better serve customers leading to increased efficiencies and a better service level for the Technical Support Center (TSC), funding of $.09 million was provided in FY 2001.

Funding of $.15 million will purchase a comprehensive software distribution and desktop systems management solution that is needed to manage the County's continuing growth in the deployment of client/server applications and the increased number of desktop technical support requests which are reported. While some enterprise management systems focus on a variety of systems management areas, the primary focus of this project will be application deployment and desktop remote control.

In order to ensure accountability and enable continuous improvement of services, Fairfax County maintains a rigorous system of measuring performance. This information is currently tracked by agencies for inclusion in the annual budget, as well as for internal management processes. In FY 2001, funding of $.18 million will support the purchase of an automated database to manage, analyze, and graphically present the large volume of data on agency performance that is currently collected.

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New Projects

Two new Human Services initiatives funded include $.25 million for commencing the replacement of the Health Department's Health Management Information System (HMIS), and $.34 million for the replacement of the ALEPH Computer Scheduling System used by FASTRAN for scheduling its rider services. These systems require replacement because current use of obsolete languages has made recruiting programming support difficult, and necessary enhancements are required.

A new business process redesign study will review the Fairfax County Circuit Court Clerk's Office operational areas outside Land Records and Public Services as a first step in developing a new case management system for civil cases. FY 2001 funding in the amount of $.25 million is included for this project. In addition, an incident reporting and training records system for the Department of Fire and Rescue has been funded at $.25 million.

In addition, $1.93 million has been included for a new, three-year project that will fund the conceptual design, business process redesign, COTS package acquisition, acceptance testing, training, conversion, and implementation of a Human Resources Information System. By initiating this project, Human Resources and the Department of Information Technology will begin the first step towards a strategic goal of an integrated suite of enterprise applications from a single vendor, with a single architecture, that will support implementation of a new Human Resources system. The benefit of a comprehensive system is to implement more efficient processes internally while providing a higher level of customer service.

A telecommunication study, funded at $.8 million, will provide funding to conduct a comprehensive study of the County's telecommunications systems and services operation, and will present recommendations for the way these services would be provided and supported.

Infrastructure Projects

FY 2001 funding has been provided to fund necessary infrastructure improvements and other short-term initiatives sponsored by the Department of Information Technology to promote greater information system efficiencies. To ensure that the County network infrastructure will meet future systems needs, funding of $.8 million is included in the Network Modernization Project in FY 2001 for technology initiatives that are anticipated to require additional network capacity and capability, which are needed to improve reliability, performance, and production management of County applications. In addition, $1.1 million has been included for the Enterprise Technology Center (ETC), which includes all activities accomplished in the computer room, as well as supporting hardware and software on all platforms. This funding will provide for modernization initiatives that will ensure and protect the County's investment in technology infrastructure by allowing users to increase storage as needed, and automating monitoring functions that will eliminate labor-intensive and error-prone interaction with the computer system.

As part of the maintenance of the infrastructure, funding of $.92 million is included to provide for the replacement or conversion of Countywide existing applications that have become obsolete. One system that is scheduled to be replaced is the DOS-based telecommunications management application (ATMS) that is used to manage the configuration, operation, repair, and billing for a major portion of the County's telecommunications network. In addition, funding is included for redesign and replacement options for all applications utilizing IDMS (Integrated Database Management System), as well as funding to convert the County's handful of small, workgroup-oriented applications that provide support for a number of critical business areas developed in the Paradox database environment.

Funding of $.4 million has been included to provide for information technology training in recognition of the challenges associated with maintaining skills at the pace of technological changes and to ensure that the rate of change in information technology does not out-pace the County's ability to maintain proficiency. As the County's workforce becomes increasingly dependent on information technology, training support has become more essential.

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An amount of $2.33 million has been included to provide County staff the latest version of the MS Office suite to maintain a common communications platform and software standard throughout the County that facilitates the easy exchange of information through adherence to common standards. The MS Office suite is a robust and integrated suite of products that will facilitate improved business communications and data sharing, and will also provide a platform with automated capabilities for work group collaboration and coordination. It is not standard County practice to upgrade with every new software release, but it is necessary for major releases, such as MS Office, to ensure compliance with licensing requirements and to obtain technical support.

Also included in FY 2001 is funding of $.15 million for agency LAN servers requiring replacement in order to remain consistent with current technology. Funding for servers will be considered, where justified, by agency-specific needs, and plans and will be based upon funding availability. Wherever practical, replacement of small, single-agency servers with larger, cost-effective multi-agency servers will be given strong consideration.

The following table lists the projects contained in Fund 104, Information Technology. Descriptions for FY 2001 funded projects follow the Project Summary table. Information regarding technology initiatives can also be found in the FY 2001 Information Technology Plan prepared by the Department of Information Technology.

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PROJECT SUMMARY

Category	FY 1999 Actual	FY 2000 Adopted Budget Plan	FY 2000 Revised Budget Plan	FY 2001 Advertised Budget Plan	FY 2001 Adopted Budget Plan
IT0001, Public Safety Comm. Network	$4,463,609	$5,249,248	$13,033,661	$5,306,578	$0
IT0002, Human Services ASSIST	1,483,992	2,916,500	3,787,892	1,500,000	1,500,000
IT0003, Plan. & Development Business Process Redesign	2,733,690	566,217	1,047,141	2,102,200	2,102,200
IT0004, Geographic Info. Sys. (GIS)	3,513,400	0	2,164,775	719,000	719,000
IT0005, Wang Transition	2,716	0	0	0	0
IT0006, Tax/Revenue Administration	2,804,994	0	4,059,198	1,350,750	1,350,750
IT0007, Computer Replacement Program	63,444	0	11,345	0	0
IT0008, Library Projects	683,998	1,441,258	2,944,245	1,521,729	1,521,729
IT0009, Software Dev. Tools	25,085	0	0	0	0
IT0010, Info. Technology Training	187,673	400,000	410,546	400,000	400,000
IT0011, Imaging Pilot	0	0	77,300	247,770	247,770
IT0013, Reorganization Implementation	56,434	0	8,899	0	0
IT0015, Health Dept. Management Information System (HMIS)	42,730	0	183,110	250,000	250,000
IT0020, Land Records Automated System (LRAS)	2,016,741	600,000	2,838,172	872,000	872,000
IT0021, Network Modernization	518,302	2,341,310	2,889,275	800,000	800,000
IT0022, Tactical Initiatives	1,345,183	1,185,000	1,826,422	393,400	393,400
IT0023, Elec. Data Interchange (EDI)	18,906	80,000	155,937	0	0
IT0024, Public Access to Information	534,616	831,528	1,725,081	1,150,000	1,150,000
IT0025, Criminal Justice Redesign	74,433	1,578,500	2,295,804	93,000	93,000
IT0026, Innovation Fund	7,254	0	136,259	0	0
IT0027, T&A Remote Entry	20,470	0	21,227	0	0
IT0029, BOS Tracking System	0	0	185,550	0	0
IT0030, LAN Migration	111,241	0	46,851	0	0
IT0031, MS Office Suite	230,848	2,806,852	2,976,004	2,333,800	2,333,800
IT0032, Office for Children Billing	0	0	300,000	0	0
IT0033, Citrix MetaFrame Migration	0	149,300	149,300	0	0

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PROJECT SUMMARY

Category	FY 1999 Actual	FY 2000 Adopted Budget Plan	FY 2000 Revised Budget Plan	FY 2001 Advertised Budget Plan	FY 2001 Adopted Budget Plan
IT0034, Treasury Management System	0	217,000	217,000	0	0
IT0035, Legislative Tracking	0	164,600	164,600	0	0
IT0036, Systems Management	0	165,600	165,600	150,500	150,500
IT0037, ISIS/PAMS Handheld Computers	0	1,043,770	1,043,770	150,000	150,000
IT0038, OBCS Internet Projects	0	50,000	50,000	0	0
IT0039, Court Modernization Projects	0	0	0	250,000	250,000
IT0040, Performance Measurement Database	0	0	0	175,000	175,000
IT0041, Program Conversions and Replacements	0	0	0	922,000	922,000
IT0042, FASTRAN Scheduling System	0	0	0	341,200	341,200
IT0043, Human Resources Information System	0	0	0	1,925,000	1,925,000
IT0044, Telecommunication Study	0	0	0	800,000	800,000
IT0045, Enterprise Technology Center Modernization	0	0	0	1,100,000	1,100,000
IT0046, Server Replacement	0	0	0	150,000	150,000
IT0047, Upgrade Commodity/Service Codes	0	0	0	84,000	84,000
IT0048, Incident Reporting and Training System	0	0	0	251,917	251,917
Total Expenditures	**$20,939,759**	**$21,786,683**	**$44,914,964**	**$25,339,844**	**$20,033,266**
Source of Funds:					
General Fund				$18,393,266	$18,393,266
E-911 Fees[1]				5,306,578	0
Interest				1,200,000	1,200,000
State Reimbursement				0	0
Technology Trust Fund				440,000	440,000
Total Funds				**$25,339,844**	**$20,033,266**

[1] A decrease of $5,306,578 in revenues due to legislation passed by the 2000 General Assembly that requires localities to account for E-911 revenue as a separate fund. Previously, a portion of the County's E-911 fees was reflected in this fund to support Project IT0001, Public Safety Communications Network. As a result of this change, E-911 revenue and related expenditures will be presented in a new fund, Fund 120, E-911.

IT0001	Public Safety Communications Network

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$8,020,221	$4,463,609	$13,033,661	**$0**	TBD

This project was established in FY 1995 to replace and upgrade the County's Public Safety Communications Network (PSCN). Funding for this project is provided from E-911 fees. The network is vital for ensuring immediate response to emergencies, and replacement is necessary to maintain performance, availability, reliability, and capacity for growth in County population. The PSCN supports emergency communications of the Police, Fire and Rescue, and Sheriff's departments, including public safety call taking (E-911), dispatching, and affiliated communications activities. Two major technologies are utilized, including a Computer-Aided Dispatch (CAD) system that provides mobile data communications and a wireless radio network for voice communications.

The CAD system is used to dispatch equipment and personnel to events and emergencies, and provide up-to-date information in a rapidly changing environment. Digital data communications allow field units to access local, state, and national databases, as well as maintain continuous contact with the Public Safety Communications Center. The CAD system contains a Mobile Data component comprised of a hardware infrastructure and a network of mobile data terminal devices, radio modems, and associated software installed in public safety vehicles. In addition to replacing the Mobile Data component of CAD, a replacement of the CAD system hardware and software for call taking and dispatching will incorporate advances made since 1986 in these types of systems and allow for future migration as new technologies emerge.

Migration to the new radio network is necessary to accommodate growing public safety communications requirements and to remedy performance problems associated with the existing system. The existing radio network is based on 1960 technology, limiting the ability to extend Countywide coverage and augment the number of channels available for voice communications. Inventories and spare parts cannot be maintained for this old system. The limitations preclude the County from improving voice communications for existing operations or to meet projected growth. These limitations severely hinder system performance in critical emergency situations.

FY 2001 funding is included for: the fourth year of a five-year lease purchase payment associated with the Computer Aided Dispatch (CAD) system ($2,001,599), the fourth year of ten-year lease payment of the wireless radio system ($2,534,956), and the fourth year of a five-year lease payment for the CAD Map Display replacement ($72,693). Funding is also included for the one-time costs of call taking and dispatch hardware and software which will provide enhancement of automated capabilities ($524,530), and year one of a five-year project to implement Automatic Vehicle Location capabilities ($172,800), which provides real time vehicle positioning to the CAD system for emergency response decisions. All these projects are critical to the County’s public safety emergency communication capabilities. These projects are entirely supported by E-911 fees.

Return on Investment (ROI): The return on investment for this project is realized through increased productivity of public safety services in Fairfax County. Replaced and upgraded technology will preserve improvements and allow further functionality and performance to be realized that will facilitate response to emergencies, improve the safety of the public and County public safety employees, and mitigate the need for extraordinarily large additions of personnel to achieve similar results without this technology. To preserve past investments, respond to critical existing requirements, and set the stage for the next generation of public safety communications technology, this project will increase access to important information, improve maintenance and reliability, and increase functionality now and for the future.

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IT0002	Human Services ASSIST

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$3,503,675	$1,483,992	$3,787,892	**$1,500,000**	TBD

Work began in 1995 on a database providing basic demographic information about people needing human services, their eligibility for those services, and a plan for delivering service. The prevailing technology at the time suggested that a single database was needed to achieve this goal. Work on the ASSIST database began in FY 1996. Phase I, including the Client Profile Builder, Eligibility Determination, and Client Service Planning modules, was completed in FY 1997 along with the integration of these systems with two existing systems, the Inquiry Screening System and the Resource Service System.

To prioritize the next steps, Human Services awarded a contract to Metamor-LCT in FY 1998 to assess the current systems and interfaces and recommend optimal architecture with life-cycle costs. As a result of this work, the Human Services agencies elected not to fund additional modules of ASSIST but to pursue a systems integration approach which will permit retention of current specialized application systems tailored to the specific business practices of individual agencies. A systems integration approach makes greatest use of investments in existing systems, is more open to commercial-off-the-shelf solutions, and allows retention of the security capabilities of individual systems.

Funding in FY 2000 provided for the award of contracts for three systems integration initiatives. Funding in FY 2001 will complete these three initiatives. FY 2001 funding of $336,900 is included for a vendor and contract management system that will replace VUWRS, a 26-year-old payment system for client services. This system will track both competitive and non-competitive contracts and offer the capacity to conduct external service request, order, and delivery. Specifically, it will contain a services product/cost module to support external service delivery and maintain a vendor file for providers of individual client services. The inflexibility of VUWRS, the lack of linkages with new State systems which staff must use, and the probability for lack of future support for this system made it clear that VUWRS will be unable to meet the growing needs for payment and reporting requirements.

FY 2001 funding of $900,000 is included for completion of the development and implementation of a workflow management technology. This technology will automate current manual processes of sharing data across agencies, streamlining, and speeding the processing of documents that must move across agencies and offices for completion. FY 2001 funding of $263,100 is included for completion of the development of a decision support system. A decision support system will allow data to be extracted from existing Human Services systems and compiled into a single database for use in planning, forecasting, trend analysis, and reporting.

These three new features will be used in conjunction with existing Human Services information systems, including those components of ASSIST which are already developed.

Return on Investment (ROI): The new features, in conjunction with components previously developed under ASSIST, will realize a return on investment, including significant improvements to client service delivery due to enhanced data sharing, further streamlined information gathering, and further reduction in redundant data entry. The replacement system for VUWRS is estimated to save approximately 15 minutes per purchase order or payment set up. Other benefits include faster service to constituents by answering questions in a timely manner, the ability to find more accurate data quickly, effective tracking of vendor payments, and staff access to an online list of available services and products.

IT0003	Planning and Development Business Process Redesign Land Development System (LDS)

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$3,507,497	$2,733,690	$1,047,141	**$2,102,200**	TBD

FY 2001 funding of $2,102,200 will support the addition of the remaining applications (special exceptions, special permits, and variances) not currently available on the Zoning and Planning System (ZAPS) system as well as make improvements to the existing system and provide management reports to track productivity and workload. The completion of this effort will eliminate the need for the Rezoning Application System (RAPS), a parallel system to ZAPS. This will permit users to operate on one unified system instead of two systems, as is the current situation. In addition, this project will integrate the additional zoning application information into LDSNet, which is being developed in FY 2000, and replace ZAPSNET. LDSNet will provide access to detailed information on zoning applications, site/subdivision plans and images of approved development plans and proffer statements on the County's Intranet and Internet.

A portion of RAPS was replaced in FY 1997 with the implementation of ZAPS. Since that time, information on rezoning cases and their associated plans has been captured and retrieved via the ZAPS system, while information on Special Exceptions, Special Permits, and Variances has continued to be captured and retrieved via the RAPS system. This has resulted in Department of Planning and Zoning (DPZ) staff having to use two systems to enter and retrieve information that is closely related. It has also meant that the Department of Information Technology (DIT) has been providing maintenance support to both systems.

The Land Development System (LDS) integrated database that supports ZAPS, PAWS, and LDSNet is a single central repository of land development data. This project will further enhance the LDS data by including Special Exception, Special Permit, and Variance information. County location information such as tax map numbers, zoning districts, and land use data are being automatically updated into the LDS system to ensure the accurate accounting of land development. This information will also be used to populate the County's Geographic Information System as well as interface with the Tax Administration System and other existing systems in the County.

Return on Investment (ROI): The replacement of the RAPS System will provide a return on investment in several areas including cost savings and benefits to staff and customers. The cost savings, realized from the replacement of the RAPS, come from the elimination of the need to maintain two systems in parallel: ZAPS and RAPS. This will save DIT staff time and other resources required to support the outmoded and failing RAPS. Replacing the RAPS also prevents the possibility of a complete system failure, which is almost certain to happen in the next five years. If the RAPS were allowed to fail, it would be costly to provide the additional personnel and space to support the work performed by the system. Other benefits resulting from the replacement of the RAPS will be realized by staff and customers as follows:

- Clearer communications with the applicants through checklist letters, acceptance letters, fee receipts;
- Improved information search and retrieval capability to better respond to customer and County inquires;
- Improved application management by automating scheduling and assigning of rezoning applications;
- Increased accuracy of fee accountability by automating fee calculations and of application validation by providing online Zoning Ordinance application requirements;
- Increased accuracy of data retrieval and review of rezoning applications by tracking relationships between zoning applications and related applications as well as reduced time required for research.
- Enhanced application and workload tracking throughout the process;
- Enhanced tracking of proffers and other building related development conditions; and
- Increased process predictability and management tools for evaluating productivity.

IT0004	Geographical Information Systems (GIS)

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$2,622,625	$3,513,400	$2,164,775	**$719,000**	TBD

This project provides continued funding for the County's planned multi-year implementation of a Geographical Information System (GIS). GIS provides the County and its citizens the means to electronically access, analyze, and display land-related data. The aerial photography taken in 1997 served as the basis for preparing the planimetric data (observable features such as building footprints, edges of roads, sidewalks) and orthoimagery (spatially corrected aerial imagery) used to develop the GIS base map for the entire County. FY 2001 funding of $165,000 is included to begin the regular process of updating the aerial imagery and orthoimagery for the County. This project establishes a four-year update cycle, where after four years all 400 square miles of the County will be rephotographed and the orthoimagery will similarly be updated.

In addition, funding of $379,000 is included in FY 2001 to begin the regular process of updating the planimetric data for the County using the aerial imagery, which will be acquired under the orthoimagery update project. One of the important aspects of electronic planimetric features is the ability to be linked to a relational attribute database for information associated with the features. For instance, building outlines can be linked to virtually any database associated with the building (e.g., owner, assessment data, deeds, etc.) and its usage. The database provides answers to queries and supports a host of analytical functions and applications in all land-related decisions.

FY 2001 funding of $30,000 is included for updating the attribute information associated with the street centerline data layer, which is of vital importance to a wide range of County operations, since it is one of the two most important data layers in the GIS and is the backbone for all routing, E-911, geocoding, and map production applications and products. Additionally, building on the street centerline data layer, funding of $30,000 is included to purchase software that will enable Fairfax County staff to route trips with a Web-based routing tool. Currently, County staff uses the traditional addressing (street address number). However, developments in location determination using the Global Positioning System (GPS) are providing additional ways to identify locations. Funding of $40,000 is included for a pilot project to investigate the usefulness of providing a geographic address as well as a street address with the intended result of improving efficiency in emergency and law enforcement activities. Funding of $25,000 has been included to link over 30 of Fairfax County's enterprise databases to the GIS data to enable data retrieval and analysis. Some of these databases include the Land Development System (LDS), Real Estate Assessment and Billing System (REABS), the Rezoning Application System (RAPS), the Urban Development Information System (UDIS), and the Police Records Management System (PRMS).

Fairfax County is now serving GIS data to both the public and its staff via both the Intranet and Internet. The software technology supporting this functionality is rapidly changing and quite complex. Web-based GIS has only emerged in the last three years. In that period, GIS has progressed from very limited functionality to increasingly functional applications that continue to provide better GIS functionality to users' browsers. Funding of $50,000 in FY 2001 will enable the GIS Branch to supplement its in-house GIS and Web expertise with outside experts who can augment our knowledge, accelerate the implementation process, and assist in identifying useful, innovative ways to deliver County services.

Return on Investment (ROI): The ability to link the GIS data to key County databases will provide a real-time mapping and analysis capability to County staff and citizens. Web functionality provides immense cost savings because heretofore prohibitively expensive GIS functionality can be delivered to virtually unlimited users at dramatically reduced cost to the County, and to no additional cost to residents with Web access. GIS also enhances the ability to locate and analyze County data online at any time of day. This system delivers information to citizens and staff when and where they need it, saving travel and scheduling time.

IT0006	Tax/Revenue Administration

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$9,389,255	$2,804,994	$4,059,198	**$1,350,750**	TBD

This project provides for the information systems development and technology infrastructure required to redesign the County's tax and revenue administration functions and upgrade FAMIS, the County's financial accounting system, and CASPS, the County and School purchasing system. The Tax/Revenue project seeks to make it as easy as possible for citizens to fulfill their tax obligations and pay for services by modernizing the internal processes used for assessing, billing, and collecting County taxes and other revenues. Funding of $1,000,000 is included in FY 2001, based on cost requirements, to fully fund the Computer Assisted Mass Appraisal Project (CAMA), which represents the final phase of the Tax Systems Modernization Project. The majority of funding required for CAMA will come from the balance of project funds remaining after completion of the personal property tax system. The replacement of this portion of the project was included in the original Tax Systems Modernization project; however, Y2K issues and requirements associated with State changes to the personal property system necessitated additional funding to complete.

Funding of $350,750 is also included in FY 2001 for several improvements to the County corporate financial information systems. Of this amount, funding of $170,000 is allocated to provide the County with Web-based Graphical User Interface (GUI) software to use in conjunction with County corporate information systems. The software will eliminate the mainframe-based "green screens" to allow user-friendly "point-and-click" technology, and facilitate the design of consolidated and/or linked screens to streamline commonly used processes. Funding of $74,250 is included to support the installation of new KPMG software designed to facilitate the restructuring of index codes within the FAMIS/FAACS accounting and BPREP budget systems. Although reclassification is basically driven by budget preparation considerations, this capability will be invaluable to facilitate implementation of the GASB-34 reporting model. Funding of $51,500 is designated to manage archival documents and expand the reporting capability for prior year financial data utilizing contemporary methods to support government mandates. This project will involve the review of existing archival and prior year reporting methods and needs and develop an action plan to streamline processing of prior year reports, supporting documents, and computer data files utilizing consulting assistance to develop the best alternatives for archival and prior year reporting of data from FAMIS, FAACS, BPREP, and the Loan Processing System (LPS). Funding of $55,000 will enhance the existing checkwriter software by providing the ability to execute electronic payments (Automated Clearinghouse, or ACH transfers) in lieu of check payment.

Return on Investment (ROI): The implementation of the new tax system will allow for the elimination of some full time regular merit positions in the Department of Tax Administration (DTA) as a result of the automated functionality of the new system. Six positions have been already redeployed to DIT to meet the increased workload in that agency resulting from implementation of these DTA information technology initiatives. The return on investment associated with the upgraded FAMIS and CASPS systems include: improved timeliness and accuracy of financial analysis and reporting, faster and more efficient response to inquiries regarding prior year data, and decreased costs of physical storage facilities. The return on investment to the County by enhancing existing corporate information systems with Web-based graphical interface software lies in a more "user friendly" system, reductions in calls to the Help Desk for assistance, increased user confidence and satisfaction, and a reduced training burden.

IT0008	Library Projects

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
$5,828,017	$678,045	$683,998	$2,944,245	**$1,521,729**	$0

This project is a three-year project to upgrade the current business application (Inlex) to more fully support circulation functions, public access to the catalog, public access to online information services, including the Internet, financial accounting, and management information. Network architecture upgrades, equipment upgrades, and enhancements are part of the program. Since its inception, the following has been accomplished:

- Data communications equipment and services have been upgraded in all branches.
- Public access to the Internet and Internet databases has been provided in all branches.
- Staff terminals have been replaced with Windows NT PCs, a requirement for the upgraded application.
- A Web interface to the Library's catalog that is part of the upgraded application has been implemented, allowing access to Library resources and customer accounts without constraints of time or location.

FY 2001 funding of $1,521,729 is included to complete the project. Within the next year and a half, the following will be accomplished:

- The current library business application will be replaced with an upgraded version.
- NT LAN services will be provided in all libraries for network printing, file storage and sharing, and remote management of resources.
- All libraries will have data communications equipment and circuit upgrades.
- The Great Falls Library will open as a larger, networked community library facility in 2000.
- Public terminals will be replaced with network workstations, allowing library users to maximize the information retrieved from FCPL and remote sources.
- Self-checkout machines will be located in all libraries.

Return on Investment (ROI): Funding this project allows the Library to: expand capacity to manage growth in demand for library services required to serve over 1 million County residents by 2001; provide access to Library resources and customer accounts, as well as other library catalogs, electronic documents, and remote databases without constraints of time or location; and provide decision support information for library management to facilitate the growth of the digital library by linking bibliographic records to stored digitized documents.

FUND 104
INFORMATION TECHNOLOGY

IT0010	Information Technology Training

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
Continuing	$692,123	$187,673	$410,546	**$400,000**	TBD

This project provides funding for information technology training in recognition of the challenges associated with maintaining skills at the same pace as technology changes. The rate of change in information technology has out-paced the County's ability to maintain proficiency. As the County's workforce becomes increasingly dependent on information technology, training support has become more essential.

FY 2001 funding of $400,000 will provide for the continued training required for Department of Information Technology staff.

Return on Investment (ROI): Continued funding will address instruction in new technologies, network management, computer operations, and software applications development and maintenance to assist County staff and systems.

IT00011	Imaging Pilot

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$77,300	**$247,770**	TBD

This project provides support in efforts to utilize imaging and workflow technologies to achieve a flexible software and hardware environment that is able to meet needs for data sharing, moving work through processes, and instant document storage and retrieval through or within various department business processes. Through these technologies, over time, the County will be able to streamline work and administratively intensive processes, improve productivity, and reduce reliance on paper. Other initiatives supported by this include beginning Enterprise Resource Planning (ERP) and GUI (Graphical User Interfaces) technology, which are designed to modernize the look and feel and extend the useful life of legacy systems.

FY 2001 funding of $67,900 is designed to provide the Department of Purchasing and Supply Management (DPSM) with an imaging and electronic document management capability that will allow ready retrieval of DPSM contract and purchase order files and other pertinent documents. The project will coordinate with Department of Human Resources and Department of Telecommunications and Consumer Services (County Archives and Records) and use the same LaserFiche imaging technology. The technology will provide conversion of hardcopy procurement-related documents into an electronic "image" that will be accessible for retrieval via personal computer and will facilitate mandated archival requirements. DPSM will have the capability to manage its primary business documents electronically by providing an imaging and electronic document management system (EDM). DPSM will maintain the active EDM files, and County Archives and Records will maintain archived EDM files in an identical file structure so that records may be retrieved via an electronic transfer.

Funding of $79,870 is included for the expansion of existing initiatives within the County Archives and Records Center to increase the efficiency, effectiveness, and accuracy of public document transfers, retrievals, and disposals as mandated by the *Code of Virginia* and the Fairfax County Board of Supervisors. This expansion will transform the Archives and Records Branch into an informational agency that participates in the creation, storage, maintenance, utilization, and exchange of electronically stored data that can be accessed by the Courts, the public, and private businesses. Also, since the proposed solution for the Archives takes advantage of an existing County contract, it is anticipated that a pilot project can be arranged to convert multiple document applications into a dynamic cross functional information medium as opposed to the current manual document management process.

Fairfax County migrated to the Internet-based Exchange platform for E-mail, which has the capability for document workflow and group collaboration. Funding of $100,000 is included for workflow applications utilizing the inherent functionality within the Exchange platform to automate business processes, such as document routing, sequential and/or parallel document processing, group collaboration, document status query, and overdue step notification and escalation, which will provide a faster environment for the completion of normal and repetitive business processes.

Return on Investment (ROI): The return on investment to be recognized through this project is the increased accessibility to information, enhanced responsiveness to the Freedom of Information Act and other information inquiries, increased staff efficiency, and enhanced security and control over original source documents. Imaging projects will provide for improved record keeping, as well as reduced costs associated with record storage space, filing cabinets, and staff filing time. The return on investment for a workflow application is gained by efficiencies realized from automating a previously paper-oriented process.

IT0015	Health Management Information System (HMIS)

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$42,730	$183,110	**$250,000**	TBD

The Fairfax County Health Department's Health Management Information System (HMIS) was originally installed in 1986. It is a MUMPS (M 4.4.0A – MSM Unix 4.3.2) application which provides the Health Department with the functionality necessary for Intake, Fee Setting, Assessment, Appointment Scheduling, Service Delivery, and Billing/Reimbursement for the following Health Department programs: Affordable Health Care, Primary Health Care, Personnel, Environmental, and Consumer Services.

Over time, the availability of MUMPS expertise required to support the Health Department's application and ensure its operability has severely declined. This has resulted in having minimal in-house County staff available to provide on-site support on an as-needed basis. Funding of $250,000 will provide emergency MUMPS support for the application through existing County contracts. In addition, the Department of Administration for Human Services (DAHS) and Health Department staff will be performing a market analysis and issuing a Request for Information to scan the industry for any COTS applications which could potentially replace HMIS.

Such a replacement would minimize the clinical staff time required for record keeping and maximize the time available for providing direct service to clients. The new application would have a graphical user interface that is more intuitive, allowing clinical staff to use the system with minimal training. This practice would allow clinical staff to complete required forms more quickly and accurately by allowing them access to the data from previous forms. Rather than handwriting the entire form, clinical staff would need only to point and click to update the data that changed. In addition, the new system will allow clinical and management staff to generate reports that they previously had to request from administrative and IT staff, allowing them quick and easy access to the data they need to make informed decisions.

Any replacement system would need to comply with both County and the State Virginia Department of Health (VDH) database standards. VDH requires a data exchange system. The current HMIS system does not conform to the Health Level 7 (HL7) standard for electronic data exchange in healthcare environments. Additionally, reengineering to a County standard will eliminate the ongoing problem of recruitment and retention of qualified personnel to support the system.

Return on Investment (ROI): HMIS is written in MUMPS (M 4.4.0A – MSM UNIX 4.3.2). Recruiting and retaining programmers with MUMPS expertise has been an ongoing challenge for the last three years. Currently, only one programmer with MUMPS expertise is on staff to support this mission-critical system. The version of MUMPS from which HMIS was developed was purchased by Intersystems CACHE. Intersystems CACHE will not perform any enhancements in this version and will provide only limited support. Any enhancements needed for the current system would require that the system be converted. Should this system be replaced with a standard database product such as Oracle or SQL Server, the County could readily recruit staff to support the system, thereby eliminating the potential need for extensive and costly contractor support.

IT0020	Land Records Automated System (LRAS)

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$2,647,190	$2,016,741	$2,838,172	**$872,000**	TBD

This project provides funding for development of an imaging system for Circuit Court's Land Records Office. The Circuit Court is required by law to maintain Land Records deed books for the County, dating from 1742 to the present. Before this project began, a number of these records were deteriorating due to exposure to light, photocopying, and handling by the public. The conversion of the documents to a more stable, readable, and protected medium was necessary. In addition, low interest rates have created a substantial workload increase as well as requests from the public to increase efficiency, storage, and retrieval capabilities of Land Records documents.

The purpose of this project is to enhance and convert these documents to electronic images for preservation and to prevent further deterioration. In addition, the imaging system will be designed to eliminate or reduce existing labor-intensive manual recording processes by automating as many of these processes as possible, reduce duplication of effort, and coordinate the transfer of information to the Department of Tax Administration and the Department of Public Works and Environmental Services.

FY 2001 funding of $872,000 will provide lease payments for system equipment, as well as enhancements including e-Commerce, new equipment, State mandated changes, and other enhancements which may include judgement abstracts and notices, enhanced search functionality, or operational statistical reports. It should be noted that a continuation of the Circuit Court business redesign efforts is funded in Project IT0039, Court Modernization.

Return on Investment (ROI): Funding this project will enhance the retrieval and administration of Circuit Court records, accomplish savings from additional staff that will not be required upon total implementation of LRAS, and reduce the amount of storage space required. In addition, an increase in revenue is expected primarily from automated in-house copy and certification capabilities, an increase in use of the enhanced Court Public Access Network (CSPAN), and fax-on-demand capabilities available.

IT0021	Network Modernization

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
Continuing	$1,730,548	$518,302	$2,889,275	**$800,000**	TBD

FY 2001 funding of $800,000 for the Network Modernization Program provides:

- Completion of the conversion of Token Ring to Ethernet;
- Upgrade of the connection to our Internet Service Provider (ISP);
- Upgrades of the Wide Area Network; and
- Upgrades of the building cabling from IBM Type 1 to Category 5 enhanced 10/100 Mbps.

The goals of the Network Modernization Program are to construct a Countywide Enterprise Network with sufficient bandwidth to be transparent to user applications, employ cost effective redundancy, and provide network management suitable to proactively detect and correct potential problems prior to any outages. In this regard, the County's Enterprise Network has developed and continues to evolve as new locations and user applications demand greater speed and expanded bandwidth capacity. The County's existing network technology has inadequate bandwidth to adequately support many existing, as well as most, new applications. In addition, almost all workstations in Fairfax County are nodes on the Enterprise network; therefore, as additional workstations are added, the demand on network resources grows. In FY2001, the migration schedule requires completion of the Token Ring to Ethernet conversion and all workstations at the Government Center Complex (Government Center, Pennino Building, and Herrity Building) be re-cabled to the Category 5 enhanced standards to support 10/100 Mbps.

Return on Investment (ROI): Each of the major components of the network modernization project, i.e., transition to Ethernet, expanded high speed backbone, new work group switches, re-cabling, and the expansion of the Wide Area Network, is designed to improve access to County-critical information. The return on the County's investment in this project will be significant, in both cost avoidance and non-quantifiable benefits. These enhancements will permit the County to continue its growth in new and replaced applications, increasing employee productivity and capacity to serve the citizens of Fairfax County. The most notable return on this system enhancement will be in the service to County patrons. A specific cost cannot be placed on the potential impact this project could have on any one application or user, but best estimates from industry analysis indicate that the County can anticipate an ROI of between 10:1 and 20:1 for each dollar invested. The benefits of an upgraded high-speed network infrastructure include:

- Reduced operational and maintenance costs through the implementation of newer and upgraded communication technologies and increased availability of replacement parts
- Improved reliability and increased capacity to support ongoing and future application enhancements and provide improved and faster flow of information among and between County agencies
- Improved service levels to the public by empowering the County with the capability to more expeditiously extract information to fulfill County citizen requests
- Increased Public satisfaction with government services and the attractiveness of Fairfax County to prospective businesses and residents by fulfilling constituent inquiries or business transactions through a high-speed network, saving valuable private and corporate resources
- Reduced staff time permitting redeployment of staff to higher-value-added issues, increased number of customers served, and/or improved services at a lower cost to County citizens

IT0022	Tactical Initiatives

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
Continuing	$1,296,546	$1,345,183	$1,826,422	**$393,400**	TBD

This project provides funding for tactical initiatives within the Department of Information Technology (DIT). These initiatives focus on immediate improvements to information technology functions currently performed in a limited capacity by DIT. FY 2001 funding will focus on new initiatives that integrate technology.

Funding of $93,400 is included to provide for the implementation of integrated technology that provides the call center with tools to better serve customers, leading to increased efficiencies and a better service level for the Technical Support Center (TSC). FY 2001 funding will provide e-mail response management, including creating records into HelpQ (the problem and change management tracking software), user self-help, real-time Web-based analyst/user interaction, Web collaboration, and browser synchronization to push pages to the customer. Since April 1998, approximately 1,000 requests for desktop support have been received by e-mail.

As systems become more complex and house data from multiple agencies, the need for proper data management is critical. Data management tools provide protection along with the flexibility to correct invalid or modified data. Funding of $150,000 is included for an automated tool to monitor and ensure integrity of all data located in the Land Development System (LDS) database. The tool will allow for the extraction of data, as well as the correction of both individual data items and mass updates. The tool will also enable users to extract data to ensure integrity, tracing the origin of the data, correcting data, and tracking any changes made to the data outside the normal application.

In addition, funding of $100,000 is included to add a Graphical User Interface (GUI) to the Case History File, the primary data repository, in the Police Records Management System (PRMS). PRMS is a comprehensive database management information system that encompasses a number of functional areas. This project will contribute enhancements such as the extensive use of color highlights, the addition of pull-down windows to display pick-lists of code, table data elements, and the addition of context-sensitive help windows. These features will increase the accuracy of data entry in PRMS by eliminating the obsolete, user-unfriendly screens leftover from dumb terminal technology and greatly decreasing the time required to train data entry personnel.

Funding of $50,000 is included to provide an improved automated mechanism, based on agreements between the Police Department and the General District Court, to schedule officer court dates in the General District Court in a balanced manner to prevent "over docketing." Currently, the General District Court experiences many days when dockets (cases assigned for processing on a specific date) overwhelm the Court. This project will develop a method to balance court schedules, reduce the administrative burden associated with case processing, and help alleviate parking problems, long waits, and other inconveniences to the citizens.

Return on Investment (ROI): Funding improvements in the TSC will result in labor costs savings for both the TSC staff and in-house County customers by providing Web-based assistance, and giving the customers flexibility for receiving assistance. The benefit of providing a tool to the data administrators for the management of the LDS data is the ability to accurately provide information to, and adequately address issues with, the public. The benefits of a GUI for the PRMS are improvement in the accuracy of data entry, reduction in the time required to train data-entry personnel, and access to a state-of-the-art, ergonomically sound interface to this critical system. The overall increase in efficiency provided by the GUI enhancement will reduce the backlog that generally exists in the data entry section and thereby provide the information on a more timely basis**.**.

IT0024	Public Access to Information

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
Continuing	$522,468	$534,616	$1,725,081	**$1,150,000**	TBD

This project provides funding for initiatives that improve public accessibility to government information and services. Numerous service delivery technologies are being explored and developed by DIT, including Information Kiosks, Interactive Voice Response Units, and Internet applications. A comprehensive approach to these new technologies is employed to ensure an efficient infrastructure capable of supporting multiple business solutions to include e-commerce transactions. In addition to enhancing customer service via their convenience and versatility, public access technologies are capable of limiting staff involvement in providing basic information, thereby allowing staff to perform more complex tasks and respond to requests for more detailed or specialized information. Five additional positions are funded in DIT in FY 2001 for the Internet Services Branch to implement and maintain a stable, supportable Internet infrastructure for the long-term.

FY 2001 funding will provide for Interactive Voice Response (IVR), Kiosk, and Internet/Intranet projects. An amount of $150,000 has been included for the Interactive Voice Response including projects for the Office for Children, Office of the Sheriff's Victim Witness Program, and multilingual programs that will allow County residents to obtain information using touch tone telephones. FY 2001 funding of $250,000 has been included to continue the implementation of multimedia kiosks throughout the County. Multimedia kiosks provide the capability for residents and visitors to receive information and conduct business at times and locations that are convenient to them. The kiosk incorporates audio, video, graphics, text, maps, transactions, and print into very attractive, user-friendly presentations. New kiosks will be added in FY 2001 to two libraries in Fairfax County that do not already have one. The libraries with kiosks are John Marshall, Fairfax City, Dolly Madison, Lorton, Pohick, Reston, Sherwood, Tysons-Pimmit, Kings Park, Centerville, and George Mason. Enhancements in FY 2001 will include added functionality for onscreen typing, the ability to send faxes and e-mails, the ability to access the Internet, enhanced printing, and additional e-commerce interfaces with State, County, and local organizations. In addition, an amount of $500,000 has been included in this project for Internet/Intranet capabilities in order to provide up-to-the-minute information to the public through the Internet and World Wide Web. FY 2001 applications provide new interactive functionality such as payment of traffic tickets via credit card, ability to enter building inspection requests and status queries, registration and payment for various County sponsored classes, and access to court dockets and other information.

In addition, funding of $250,000 is included to enable citizens to report address changes and vehicle sales via the Internet using a secure transaction form. Currently, DTA staff must print the information submitted daily via the Internet and input this data into the mainframe tax system. This enhancement will provide citizens online vehicle registration capability of the approximately 150,000 new vehicle registrations reported annually.

Return on Investment (ROI): Voice Response, Kiosks, and Internet/Intranet development will allow the County to provide after-business-hours service, up to 24 hours per day, 7 days a week. These systems allow citizens to access information, pay taxes, schedule inspections, receive faxed information, etc. without staff assistance during and outside of normal business hours. County residents will be able to get information on all the services provided by the County, find out about child care and health programs, apply for parking permits, and more. It is anticipated that tangible savings in terms of both staff time and material (postage, copying, and packaging) will be realized. Additional revenue is anticipated by facilitating the repeat customer registration process and allowing customers to register for County sponsored classes during non-business hours. The tax system enhancements improve customer service delivery by limiting the growth of telephone contacts, resulting in improved response times to phone inquiries. This capability will also eliminate the manual keying of data by developing an automated interface to update the integrated tax system (ITS) database.

FUND 104
INFORMATION TECHNOLOGY

IT0025	Criminal Justice Redesign

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$258,263	$74,433	$2,295,804	**$93,000**	$0

The Department of Juvenile Justice (DJJ) application is part of the State objective to create a standardized system for all jurisdictions in the State of Virginia to collect and manage information about cross-county offenders and arrests, and will be expanded to include functions such as services and placement management. The State Board for the Department of Juvenile Justice is requiring all jurisdictions to provide up-to-the minute data that can be accessible online via its new system. This action is mandated by the Code of Virginia 16.1-224 sections A through C:

"All court services units serving juvenile and domestic relations district courts shall make data submissions to the Virginian Juvenile Justice Information System of any persons referred to an intake officer of a court service unit pursuant to 16.10260 except that no data submission shall be required for a juvenile charged with a traffic infraction as defined in 46.2-100."

In order to ensure consistency of data between State and local applications and avoid duplicate data entry, an automated interface is required. FY 2001 funding of $93,000 will provide an interface to allow existing data to be automatically transmitted and/or retrieved by the JUVARE system from the state DJJ application, as well as additional modules as they are released by the State Supreme Court. This project is necessary due to new State business system requirements and to avoid having to duplicate data entry of offender information locally. This project will provide an integrated system that can be accessed throughout the Agency to provide up-to-the-minute data needed to support daily operations on the local and State level.

Return on Investment (ROI): Upon completion of this project, the need will be eliminated to staff four data entry clerks to manually enter data into the DJJ system, as well as the JUVARE system (double data entry), for online data as required by the State. This project will also preclude manual calculation and preparation of reports required by the State.

IT0031	MS Office Suite

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
Continuing	$0	$230,848	$2,976,004	**$2,333,800**	TBD

This project provides County staff with the latest version of the MS Office suite to maintain a common communications platform and software standard that facilitates the easy exchange of information through adherence to common standards. It is anticipated that upgrades will not be done with every new software release, but it is necessary for major releases, such as MS Office, to ensure compliance with licensing requirements and to obtain technical support. The MS Office suite is a robust and integrated suite of products that will facilitate improved business communications and data sharing, and will also provide a platform with automated capabilities for work group collaboration and coordination.

The goals of this project are to:

- Extend mainstream desktop productivity tools to integrate with emerging Internet and Intranet capabilities
- Increase personal productivity by standardizing and integrating desktop software products and provide improved efficiencies for ease of learning/use, training, and software support
- Provide the County with tools and capabilities that are compatible with both residential and commercial constituents

There are several important reasons for maintaining a common communications platform and desktop standard software throughout the enterprise. Since the MS Office suite is integrated with the enterprise e-mail system, a desktop standard throughout the County will ensure compatibility for the easy exchange of attachments with e-mails. The latest version of the MS Office suite will also include the newest e-mail client. The same MS Office suite and e-mail client are needed across the County to ensure a consistent standard for all end users and to ensure proper technical support. This is especially important because the new e-mail system client software is tightly integrated with the MS Office suite. By FY 2001, DIT's technical support staff will have been provided time to familiarize themselves with the version of the product that will be deployed and will have researched deployment problems and considerations that other major enterprises have encountered in implementing the product.

FY 2001 funding of $2,333,800 will upgrade all County microcomputers (an estimated 8,000 units) which have Office 97 and Outlook 98 to the latest version of MS Office suite, which is scheduled for release in early FY 2001. In addition, this project will allow a pilot to evaluate the impact of upgrading microcomputer operating systems from Windows 98/95 to Windows NT 2000.

Return on Investment (ROI): A common graphical user interface will increase ease of learning and ease of use by reducing training requirements, facilitate broader usage of the overall software capabilities, and provide an integrated development environment, which will provide end users and agency IT staff with tools to develop their own internal work group applications. Users may use the productivity tools they are familiar with to collaborate quickly and easily over the existing Intranet infrastructure. The new version of the MS Office suite facilitates the collaboration of ideas among work groups via the Intranet by eliminating the need for dealing with multiple copies of outdated files and reviewing feedback scattered in e-mails and documents. The new version of the MS Office suite has improved Web publishing capabilities and improved performance.

IT00036	Systems Management

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$165,600	**$150,500**	$0

Funding of $150,500 is included in FY 2001 for a comprehensive software distribution and desktop management solution needed to manage the County's continuing growth in the deployment of client/server applications and the increased number of reported desktop technical support requests. While some enterprise management systems focus on a variety of system management areas, the primary goals of this project will be application deployment and desktop remote control. These two areas require immediate attention in order for the technical support staff to efficiently support end users. Because of the cost of this technology, this project will be a pilot project for DIT. In the area of application deployments, it is anticipated that this technology will be used to deploy new releases of the MS Office suite, as well as client software enhancements to business applications, like the Community Services Board's Synaps application and the Department of Tax Administration's Integrated Tax system. The goals of the application deployment testing will be:

- To automate the distribution, installation, and synchronization of County or agency-wide applications
- To implement a configuration monitoring capability that detects and corrects changes in software configurations and continuously tracks the operational status of deployed applications
- To test the ability to easily create composite software packages to deploy an application across multiple platforms
- To test the ability to upgrade or deploy the most common operating systems across a network

Desktop remote control reflects the evolving role of the traditional help desk into a single point-of-contact service desk. The service desk goes beyond simple call and problem management functions that support internal IT customers—it is the key part of a comprehensive enterprise management system. It is believed that the desktop remote control capabilities will reduce average call times, improve first-call success rates, reduce escalation to second level support, reduce the need for dispatching technicians and ensure success when technicians are dispatched via improved diagnosis, and reduce repeat calls by educating end users. These expectations will be attained through features that allow the staff to:

- Control of the remote desktops and execute commands and applications
- View the display of the remote desktop and monitor activities
- Execute diagnostic commands, such as scripts or batch files, on the remote desktop
- Reboot the remote workstation

Return on Investment (ROI): Funding this project allows the County to realize the following benefits, which are associated with the implementation of an automated software distribution and desktop management system: save costs by getting applications into production and eliminating distribution bottlenecks; deploy software to an unlimited number of systems from a single point; maximize staffing resources by minimizing on-site visits and providing staff with a management tool to manage the IT environment; leverage IT investment by using resources most effectively with automated construction of file packages, rapid delivery, as well as automatic detection and response to configuration changes and desktop management.

IT00037	ISIS/PAMS Handheld Computers

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
$1,193,770	$0	$0	$1,043,770	**$150,000**	$0

This project provides funding for initiatives that will further the completion of both the Inspection Services Information System (ISIS) and the Plan and Agreement Monitoring System (PAMS) Handheld projects. The additional functionality that will be achieved through this funding is part of the overall goals that were originally established on the functional specifications of these systems. The approach used to develop both systems was modular in nature so that the urgent problems of Y2K issues were resolved first, while at the same time laying the foundation for later integration of necessary tools to increase the inspectors' productivity.

For PAMS, FY 2001 funding will provide online help and the download of data from the mainframe to the Oracle database. There are 33 different inspection types in the site inspector's program. These inspection types cover the entire range of activities associated with site construction, from initial clearing and grading to final asphalt laydown and pavement stripping of streets. Online help would inform the user of critical inspection tasks that are peculiar to an inspection type. Using the Help feature, the inspector would have available a description of the material or construction process being observed and the pertinent standards from County and State manuals. The capability to download data from PAMS to the Oracle database would facilitate several business processes. There are significant follow-on actions that must occur whenever violations are issued. PAMS assigns a sequential inspection number to the violation, and this inspection number must be retrieved for all subsequent documentation involving that violation, to include possible litigation. Downloading this data would establish the relationship between the violations and the inspections. The branch office administrative system is also dependent on direct access to this information for management purposes.

For ISIS, FY 2001 funding will provide printers for inspectors to print inspection results on site. The application was designed with this capability. Currently, the inspectors are duplicating efforts because they have to manually write the inspection results, then re-enter their remarks in laptop computers.

FY 2001 funding will also provide emulation software (IBM 3270) for both PAMS and ISIS. This software will enable the inspectors to access the mainframe through laptop computers. This is a necessary tool for the inspectors, since much of the data needed is only available through the mainframe.

Return on Investment (ROI): Funding this project allows the County inspectors using PAMS to be consistent in enforcing County regulations. In addition, Online Help will prevent inspectors who are not familiar with current construction practices from requesting items that are not needed. Downloading data from the mainframe will increase the inspector's productivity and ensure data integrity. Printing the inspection results by the ISIS inspectors will not only increase productivity for the inspectors, but will also decrease the number of phone calls to the office by customers who cannot read handwritten documents. Developers, contractors, and homeowners will all benefit from these features.

IT0039	Court Modernization Projects

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$250,000**	TBD

This project will provide funding to continue the Circuit Court's efforts to improve the Court systems. FY 2001 funding of $250,000 is included for Fairfax County Circuit Court case management capabilities to include imaging and electronic filing. The initiative includes an analysis of current processes and procedures and the ability to use commercial-off-the-shelf (COTS) case management software. Available COTS case management software packages utilize relational databases and feature case tracking, party processing, scheduling, financial and overdue processing, and numerous standard and adhoc reports. Customization is made possible through definable tables, including judge information, hearing types, fee schedules, lawyers and law firms, sentencing options, court schedules, codes, ordinances, court rules, and other legal references. This initiative also provides limited vendor-provided software modifications and a portion of the needed concurrent user licenses and equipment for the selected COTS case management software to be utilized in the Fairfax Circuit Court Criminal and Civil divisions. FY 2001 funding will provide for analysis, modifications, user licenses, maintenance fees, and equipment for the selected COTS software.

Return on Investment (ROI): Funding this project allows the Fairfax County Circuit Court to begin to optimize case management which will position the Court to take advantage of imaging and electronic filing technology. Updated case management software will enhance the ability to provide appropriate access to vital court information. Documents electronically filed or imaged can be made available for simultaneous review by multiple users for quicker and improved service to both in-house and public users. It is anticipated that tangible savings in terms of staff time will be realized because it will no longer be necessary to physically retrieve file folders to obtain case information that will be made available online. Also, savings will be realized in terms of reduced storage space and records management requirements and elimination of some file duplication costs.

IT0040	Performance Measurement Database

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$175,000**	TBD

In order to ensure accountability and enable continuous improvement of services, Fairfax County maintains a rigorous system of measuring performance. This information is currently tracked by agencies for inclusion in the annual budget, as well as for internal management processes. There are approximately 2,400 performance indicators that address output, efficiency, service quality, and outcome measures. The current process requires agencies to track their data internally, then re-key the data into a word processing table incorporated in each budget narrative. In addition to being extremely time-consuming, this method does not incorporate automated capability for sorting measures by program area, indicator type, achieved target, etc. in order to allow more effective performance management. Currently, sorting must be done by visually inspecting the tables on hundreds of pages in the budget, copying relevant data, and performing any analysis manually or re-entering data onto a spreadsheet.

FY 2001 funding of $175,000 will support the purchase of an automated database to manage, analyze, and graphically present the large volume of data on agency performance that is currently collected. This Countywide project will use a commercial-off-the-shelf, Web-based application to allow remote data entry by all agencies to track their performance measures in a more timely manner, as well as manage them more effectively. The system will generate menu-driven input screens, accept and validate data, maintain electronically stored data, and generate standard reports. Easy-to-use query tools, report writer software, and graphing capability will be part of the proposed system.

The database will also enhance public access to performance information, as the County will have the capability to present information in more user-friendly formats such as graphical depictions. Currently, citizens must page through agency budget narratives to find performance data, which is only presented in text and number format. A database linked to the Internet would make this information more readily available and therefore enhance the public's understanding of County services.

Return on Investment (ROI): Funding this project provides a significantly improved automated process for tracking, managing, and reporting agency performance data. This project will eliminate the need for time-consuming manual tracking and duplicative data entry, as well as greatly enhance graphical presentation of data, a function that is rarely accomplished under the current system due to the staff-intensive requirements. This improved presentation and management of critical performance data will translate to more efficient and effective County services.

IT0041	Program Conversions and Replacements

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$922,000**	TBD

This project provides funding for the replacement or conversion of existing applications that have become obsolete and are small enough in scale to accomplish quickly.

FY 2001 funding of $353,000 is included to replace the DOS-based telecommunications management application (ATMS) that is used to manage the configuration, operation, repair, and billing for a major portion of the County's telecommunications network. FY 2001 funding will cover the cost of replacing the existing hardware and software, converting the existing data and billing interfaces, training staff, and implementing new features currently unavailable such as cable/jack management, network monitoring, and Web-based information collection and delivery.

Funding of $369,000 is included for redesign and replacement options for all applications utilizing IDMS (Integrated Database Management System) and contracts with appropriate vendors for replacement, conversion, and operational support. IDMS is a mainframe database product that is used by several County systems, including the Public Sewer Application Tracking System, Fire Leave Management System, Criminal/Traffic Court Docket System, and the Housing Loan Processing System. The IDMS product has lagged in comparison to relational database software (e.g. DB2 or Oracle) and object-oriented database management systems and is no longer favored by most of the industry for new application development, making staff and contractor IDMS support necessary for the development and maintenance of existing systems difficult to obtain.

Funding of $200,000 is included to convert the County's handful of small, workgroup-oriented applications that provide support for a number of critical business areas developed in the Paradox database environment. Paradox is not a fully supported platform within the County, and over the years, support for these systems has been provided primarily by contract services, which are becoming increasingly more difficult to recruit. The remaining legacy Paradox applications (residing in Clerk to the Board, Electoral Board, County Attorney, and Department of Planning and Zoning) will be replaced with new applications utilizing County supported technology (primarily Web-based).

Return on Investment (ROI): Replacing obsolete or antiquated databases will not only maintain functionality, but in most cases improve it and make the most efficient use of existing and future resources. In addition, replacement of all applications using IDMS will result in annual savings of the IDMS and OLQ/Visual Express software license and maintenance expenses.

IT0042	FASTRAN Scheduling System

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$341,200**	TBD

This project provides funding for replacement of the ALEPH Computer Scheduling System used by FASTRAN for scheduling its rider services. The current system is ten years old and is not capable of being networked. Therefore, it cannot be included in the Human Services Integrated Systems project. FASTRAN uses this system to schedule over 520,000 one-way rides per year, serving over 2,800 unduplicated clients per year. The schedules encompass 102 peak time (a.m. and p.m.) routes and 20 mid-day (Dial-a-Ride) routes in addition to charters and group trips. FASTRAN services cover an estimated 550-square-mile area that includes Fairfax and Arlington Counties, and the Fairfax, Falls Church, Alexandria, and Sterling areas.

FY 2001 funding of $341,200 will allow for the purchase of a system that can perform consumer registration, scheduling, and dispatch functions using ArcView-based geographic information system data from Fairfax County and the Northern Virginia District Planning Commission. The system will include automatic geocoding of addresses, using a geographic information system database, street intersection, or by indicating location on a graphic display of the street network. The system will display routes and stops within a user-defined geographic area on the street network by time of day and day of the week. It will recognize geographic obstacles that impact travel time, including bodies of water and interstate highways. The system will perform scheduling on a same-day mode as well as one day to 365 days in advance for a system that could expand to accommodate 150 concurrently operating buses (the currently system is handling 96) accommodating 4,000 daily one-way rides (the current system is handling 2,200).

The replacement system will also provide for a comprehensive client database, including a choice of possible sponsoring agencies and complete addresses, longitude/latitude, and optional landmark designation. This database would also include a user-defined ADA listing of mobility limitations. The system will provide for accessing patron data by name, phone number, or identification number. It also will provide for separate accounting for rides scheduled to FASTRAN buses and to taxis in the manner specified by FASTRAN. This accounting would allocate vehicle revenue hours to sponsoring agencies. The system will enable for the user to compile data for reports and process data for Medicaid reimbursement, which was over $244,000 in FY 1999. It will allow the user to download data from patron and trip files and define and develop reports using any data field, in addition to the standard reports supplied with the software package. The system can also interface with report writers, database programs, and spreadsheets.

Return on Investment (ROI): The new system will allow FASTRAN to meet the escalating needs of Fairfax County residents who require paratransit transportation services, potentially improving scheduling efficiency by as much as 10 percent. In addition, funding this project allows FASTRAN to automate the Medicaid reimbursement accounting process that in FY 1999 collected over $244,000. Currently, this process is performed manually and requires a substantial amount of staff time to complete.

IT0043	Human Resource Information System

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$1,925,000**	TBD

Funding of $1,925,000 in FY 2001 is included for the first year of a three-year project to support the conceptual design, business process redesign, COTS package acquisition, acceptance testing, training, conversion, and implementation of a new Human Resources Information Services (HRIS) system. By initiating this project, Human Resources and the Department of Information Technology (DIT) will begin the first step towards a strategic goal of an integrated suite of enterprise applications from a single vendor, with a single architecture, that supports implementation of a new Human Resource system. The benefit of a comprehensive system is the compatibility with various latent components (which could include a financial and procurement system) that can be "turned on" with minimal effort when needed.

The County's existing Personnel/Payroll System (PRISM) is a legacy application that runs on IDMS/R, a 1980's architecture database management system. PRISM was based on a package designed in the late 1970's. Although progressive at the time, it has required major customizations to meet the needs of the County.

DIT's ability to leverage and integrate emerging technologies is hindered due to the outdated and closed system architecture of PRISM. Maintenance of the existing system has become increasingly expensive and time consuming. Migrating to a new HRIS system will allow the department to implement more efficient processes internally while providing a higher level of service to customers. Without replacement of the current system, DIT will be unable to achieve the following strategic goals: employee and manager self-service, Internet/Intranet deployable HRIS modules, process improvement for better customer service and greater efficiency, and improved processes through integrated HR practices.

Return on Investment (ROI): The new system will provide a new Enterprise Resource Planning Solution that will give DIT the flexibility to take advantage of modern technology and provide the department with the ability to implement more efficient processes internally while providing a higher level of service to customers. In addition, the County could eliminate the high annual fee required by the IDMS/R vendor to run this software on its mainframe.

IT0044	Telecommunications Study

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$800,000**	TBD

This project provides funding to conduct a comprehensive study of the County's telecommunications systems and services operation, and will present recommendations for the way these services could be provided and supported before any new major investments are made to the current telecommunications infrastructure. The study will look at the County's current telecommunications network, service requirements, cost of services, new telephony applications, industry trends, and the County's fixed infrastructure assets such as the I-Net.

Telecommunications technology is an essential mechanism in the County government's ability to support its business mission. The County has reached a decision on the future direction of its telecommunications services, influenced by several major factors: the need to replace several outdated major PBX systems; and new requirements to achieve productivity and cost savings through deployment of telephony applications such as integration of voice, pager, and e-mail messaging, wireless communications, integrated voice/data networks, and secure and reliable Internet access (which support public access, telecommuting, and other work place productivity initiatives). The current system provides telecommunications products and services to over 300 offices and service facilities. The various mix of County service facilities (libraries, fire stations, health clinics, recreation centers, human services regional offices, consolidated government centers, etc.) requires a broad range of product offerings and communications services. At the same time, the telecommunications industry has exploded with new technologies, product offerings, and opportunities to bundle previously separately provided services due to increased market competition as a result of the Telecommunications Act of 1996.

FY 2001 funding of $800,000 will support contractual services to:

- Evaluate the current County telecommunications environment, including the technology and the cost of operation
- Develop pros and cons, including functional, operational, and financial implications of customer-premise-based equipment (CPE) versus out-sourced dial-tone delivery services, and which strategy will effectively implement voice over the County's I-Net infrastructure investment
- Develop a uniform numbering/dialing plan for dialing between all County government sites
- Identify specialized applications, features, or functions specifically geared toward certain government functions such as public safety
- Review and make recommendations on replacement of the County's non-public safety radio system
- Determine strategies and options for phone sets
- Report on the state of the regulatory environment and competition in the market and identify opportunities to package or bundle voice service contracts (local and long distance dial tone, ISP, cellular, etc.)
- Conduct technical analysis of new telephone system technology
- Provide options on the use of staff versus contractors to perform required operational functions and systems to effectively manage telecommunications services

Return on Investment (ROI): Funding this project will enable the County to make strategic investment decisions regarding the acquisition (or not), use, and management of communications-related technology and services in line with County strategic directions and technology initiatives, ultimately enabling productivity and service enhancements throughout all agencies.

IT0045	Enterprise Technology Center Modernization

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$1,100,000**	TBD

This project provides $1,100,000 for the Enterprise Technology Center (ETC) modernization initiatives that will ensure and protect Fairfax County's investment in technology infrastructure. The ETC includes all activities accomplished in the computer room, as well as supporting hardware and software on all platforms. These initiatives will respond to new Information Technology trends, increase processing capacity and access, improve reliability, availability and performance, provide a faster response to customer needs, improve production management, and develop and maintain staff skills in the latest technology.

FY 2001 funding of $375,000 will enable implementation of Storage Area Networking (SAN) architecture, which is a shared storage repository attached to multiple host servers via a storage interface. This architecture allows higher levels of performance to support the continuously growing amounts of data being stored online. It enables improved performance that will shrink backup and restore Windows. It also allows applications to share data across the enterprise, rather than building independent, and sometimes redundant, repositories of data.

FY 2001 funding of $45,000 will support the initial investigation of automated operations monitoring technologies and systems management tools. Computer monitoring software tools provide the computer operator with the ability to interactively and proactively monitor computer performance, availability, and connectivity. Automated tools are available that will significantly reduce the amount of manual intervention currently required.

FY 2001 funding of $680,000 will enable the redesign of the mid-range computer platform (RS6000/AIX) currently being used by applications. The number and size of these applications have grown exponentially in recent years, making maintenance support difficult. Some older applications are running on hardware that is no longer upgradeable and expensive to maintain. Consolidation of applications and processors into a RS/6000 SP machine is desired to enable staff to support all applications. This project includes the expansion of the current hardware to the Department of Tax Administration to meet its anticipated capacity needs.

Return on Investment (ROI): This project will increase the response times, decrease the number of downed computer systems, and address the problems with the current demand for storage. By implementing this project, the requirement for addition staff positions to monitor client/server and network operations can be avoided.

IT0046	Server Replacement

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
TBD	$0	$0	$0	**$150,000**	TBD

This project provides funding for agency LAN servers requiring replacement in order to remain consistent with current technology. Funding for servers will be considered, where justified, by agency-specific needs and plans and will be based upon funding availability. Wherever practical, replacement of small, single-agency servers with larger, cost-effective, multi-agency servers will be given strong consideration.

It is anticipated that FY 2001 funding of $150,000 will replace approximately 14 servers in agencies, including the Department of Planning and Zoning, the Park Authority, the Department of Administration for Human Services, and the Department of Information Technology.

Return on Investment (ROI):
Funding this project ensures aging LAN servers will be replaced with current hardware technology that will meet the increased functional and performance requirements of the new operating system and application software being implemented throughout the County to meet changing business needs.

IT0047	Upgrade Commodity/Service Codes

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
$84,000	$0	$0	$0	**$84,000**	$0

This project is intended to replace the Fairfax County and Fairfax County Public Schools (FCPS) outdated and proprietary stock numbering system with a numbering system that can be used universally between Fairfax County and FCPS and other governments and vendors. Upon implementation, both the County's Identification Numbering (FCIN) system and the FCPS stock numbering system would be merged into a universally accepted material identification numbering system. Implementation of the mainframe procurement system provided the opportunity to combine Fairfax County and FCPS operational needs into one software application. This logic extends to the standardization of the stock numbering system structure to allow effective communications between organizations and to accumulate standard information on contracts, usage data, locations, etc., of common items.

FY 2001 funding of $84,000 will support the purchase of an off-the-shelf, more widely used and centrally updated numbering system to replace the "internally developed" stock numbering systems currently used by both Fairfax County and FCPS. There are currently over 80,000 numbers maintained in the mainframe numbering database which serves as the basis for automated purchase requisition assignments for buyers, the basis to register vendors, and the primary mechanism to track and maintain Fairfax County/FCPS consumable inventory programs.

Return on Investment (ROI): The return on investment to the County from the acquisition of a standardized stock numbering system will be realized through the reduction in the number of data libraries to be maintained, reduction in staff time dedicated to cataloging, reduction in Help Desk support, increased database accuracy, and improved reporting and benchmarking capability.

IT0048	Incident Reporting and Training System

Total Project Estimate	Prior Year Expenditures	FY 1999 Expenditures	FY 2000 Revised Budget Plan	FY 2001 Adopted Budget Plan	Future Years
$1,141,312	$0	$0	$0	**$251,917**	$889,395

Funding of $251,917 is included for a replacement records management system that will capture field incident data for suppression and Emergency Medical Services (EMS) activities. Codes used in the system will be based on the United States Fire Administration's National Fire Prevention Association (NFPA) revisions of the 901-coding standard for suppression data and the Virginia Department of Health data reporting. The new system will allow functional flexibility (added value) to capture and interface with other department functions. The new system will provide for creating, updating, and deleting incident records as well as all training records. The system will use electronic input forms for data collection and validation before data is placed into a server database. A client/server system will take advantage of the Web/LAN/WAN and be expandable to meet the changing needs of the Department. Access to the database will be provided by user-friendly retrieval programs or build-in report writer which will provide the department staff easy accessibility to view pertinent information for decision-making, State and National data reporting, and Freedom of Information Act (FOIA) requests.

The replacement system will allow Fire and Rescue to comply with:

- The new NFPA Coding Requirements within the National Fire Incident Reporting System
- The State of Virginia EMS mandated reporting requirements
- Minimum standards set by Virginia Department of Fire Programs for agency accreditation and certification under the Virginia/National Professional Qualifications System

Fire Service data is an integral part of the business process. Data is used for legal documentation and provides the County with meaningful data for critical decision making.

Return on Investment (ROI): Funding this project allows the Fire and Rescue Department to comply with the NFPA coding requirements and Virginia EMS mandated reporting requirements. This data will allow the County to identify specific fire and EMS issues and make justifiable recommendations for improved services. It is anticipated that there will be a substantial growth in the number of incident and FOIA requests. This system will increase availability to the data without sacrificing security, provide maximum data visibility to citizens, Board of Supervisors, County staff, and other jurisdictions. Through Web browser technology and access to a server database, citizens may retrieve public information faster. This practice will reduce the number of Freedom of Information Act (FOIA) requests and staff workload to process these requests. The data will become more accessible to management for decision making.

The training database portion of this project will allow database entry from the fire and rescue stations. This process will increase accuracy and timeliness while reducing clerical staff time required to maintain these records. Personnel will be able to monitor their own training records and re-certification requirements. This practice will ensure that all personnel complete training requirements in a timely manner and maintain necessary certifications.

FUND 104
INFORMATION TECHNOLOGY

FUND STATEMENT

Fund Type G10, Special Revenue Funds **Fund 104, Information Technology**

	FY 1999 Actual	FY 2000 Adopted Budget Plan	FY 2000 Revised Budget Plan	FY 2001 Advertised Budget Plan	FY 2001 Adopted Budget Plan
Beginning Balance	**$18,072,251**	**$0**	**$22,077,473**	**$0**	**$0**
Revenue:					
E-911	$6,674,395	$5,249,248	$5,249,248	$5,306,578	$0
Interest	1,299,406	1,200,000	1,200,000	1,200,000	1,200,000
Technology Trust Fund	440,110	0	550,000	440,000	440,000
State Reimbursement	449,192	0	0	0	0
Total Revenue	$8,863,103	$6,449,248	$6,999,248	$6,946,578	$1,640,000
Transfers In:					
General Fund (001)	$16,081,878	$15,337,435	$15,838,243	$18,393,266	$18,393,266
Total Transfers In	$16,081,878	$15,337,435	$15,838,243	$18,393,266	$18,393,266
Total Available	**$43,017,232**	**$21,786,683**	**$44,914,964**	**$25,339,844**	**$20,033,266**
Expenditures:					
IT Projects	$20,939,759	$21,786,683	$44,914,964	$25,339,844	$20,033,266
Total Expenditures	$20,939,759	$21,786,683	$44,914,964	$25,339,844	$20,033,266
Total Disbursements	**$20,939,759**	**$21,786,683**	**$44,914,964**	**$25,339,844**	**$20,033,266**
Ending Balance	**$22,077,473**	**$0**	**$0**	**$0**	**$0**